IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (Currently Amended): A method of measuring dimensions and alignment error of thin film magnetic heads formed on a raw bar cut-off from a substrate, comprising the steps of:

illuminating a magnetoresistance effect element and a resistance detector element which is formed for monitoring a lapping process, both of which are formed on the ~~substrate~~raw bar, with illuminating light whose wavelength is 300 nm or less;

forming an image by imaging light reflected from said elements;

converting said image to an image signal through photoelectric conversion; and

detecting variation in dimensions ~~and alignment error~~ of the magnetoresistance effect element and the resistance detector element formed on the ~~substrate~~ raw bar, and alignment error between the magnetoresistance effect element and the resistance detector element from said image signal.

Claim 2 (Previously Presented): A method according to claim 1, wherein the illuminating light includes a wavelength component of 248 nm.

Claim 3 (Previously Presented): A method according to claim 1, wherein the illuminating light includes a wavelength component of 266 nm.

Claim 4 (Previously Presented): A method according to claim 1, wherein the illuminating light includes a wavelength component of 213 nm.

Claim 5 (Cancel)

Claim 6 (Previously Presented): A method according to claim 1, wherein the magnetoresistance effect element and the resistance detector element are covered with end face protection films.

Claims 7-10 (Withdrawn)

Claim 11 (Currently Amended): An apparatus for measuring dimensions and alignment error of thin film magnetic heads formed on a raw bar cut-off from a substrate, comprising:

a light source for emitting light whose wavelength is 300 nm or less;

illuminating means for illuminating a magnetoresistance effect element and a resistance detector element which is formed for monitoring a lapping process, both of which are formed on ~~a substrate~~the raw bar, with illuminating light emitted from said light source;

imaging means for obtaining an optical image of ~~said substrate~~the raw bar, illuminated by said illuminating means;

image pick up means for converting [[an]]said optical image of ~~said substrate~~the raw bar, which is imaged by said imaging means, to an image signal through ~~photoconversion~~photoelectric conversion; and

detecting means for detecting variation in dimensions ~~and alignment error~~ of said magnetoresistance effect element and said resistance detector element formed on the ~~substrate~~ raw bar, and alignment error between said magnetoresistance effect element and said resistance detector element from said image signal that is obtained by said image pick up means.

Claim 12 (Previously Presented): An apparatus according to claim 11, wherein said light source emits light having a wavelength of 248 nm.

Claim 13 (Previously Presented): An apparatus according to claim 11, wherein said light source emits light having a wavelength of 266 nm.

Claim 14 (Previously Presented): An apparatus according to claim 11, wherein said light source emits light having a wavelength of 213 nm.

Claims 15-16 (Cancel)

Claims 17-19 (Withdrawn)

Claim 20 (Previously Presented): A method according to claim 1, wherein the illuminating light has a wavelength of 200 nm.

Claim 21 (Previously Presented): A method according to claim 1, further comprising a step of displaying the measured results at least one of the

variations in dimensions of the elements or distribution of alignment error on a display.

Claim 22 (Previously Presented) An apparatus according to claim 11, further comprising a display for displaying the measured results at least one of the variations in dimensions of the elements or distribution of alignment error.